WHAT IS CLAIMED IS:

1. A decoder apparatus for a video compression and decompression system, comprising:

an input to receive an encoded video sequence;

an output for a decoded video sequence;

a video decoder coupled to the input and configured to decode the received encoded video sequence; and

a filter module coupled to the video decoder and the output and configured to filter a decoded video sequence received from the video decoder, the filter module having a variable filter strength that is a function of detected motion activity within the video sequence.

2. The decoder apparatus of Claim 1, wherein the filter strength is adjustable to one of a predetermined number of levels.

3. The decoder apparatus of Claim 2, wherein the filter strength is adjustable to one of a high level, a medium level and a weak level.

4. The decoder apparatus of Claim 3, wherein the medium level is a default level.

5. The decoder apparatus of Claim 1, wherein the filter module includes an activity counter configured to categorize each frame of the decoded video sequence as a high activity frame or as a low activity frame.

6. The decoder apparatus of Claim 5, wherein the activity counter increases a first counter value for each high activity frame and decreases the first counter value for each low activity frame.

7. The decoder apparatus of Claim 6, wherein the activity counter decreases a second counter value for each high activity frame and increases the second counter value for each low activity frame.

8. The decoder apparatus of Claim 7, wherein the activity counter determines a difference between the first counter value and the second counter value.

9. The decoder apparatus of Claim 8, wherein the filter module includes a threshold detector configured to compare the difference with at least one predetermined threshold value and configured to generate a control signal to adjust the filter strength.
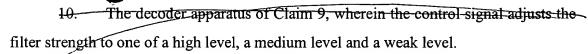
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10.   The decoder apparatus of Claim 9, wherein the control signal adjusts the filter strength to one of a high level, a medium level and a weak level.

11.   The decoder apparatus of Claim 10, wherein the medium level is a default level.

12.   A video compression and decompression system, comprising:

an input to receive an encoded video sequence;

an output for a decoded video sequence;

a video decoder coupled to the input and configured to decode the received encoded video sequence; and

a filter module coupled to the video decoder and the output and configured to filter a decoded video sequence from the video decoder, the filter module having a variable filter strength that is a function of detected motion activity within the video sequence.

13.   A filter module for a video compression and decompression system, comprising:

an input to receive a decoded video sequence;

an output for the decoded video sequence;

an activity counter configured to determine motion activity within the decoded video sequence; and

a threshold detector coupled to the activity counter and configured to adjust a filter strength as a function of the determined motion activity within the decoded video sequence, the threshold detector selectively adjusting the filter strength to one of a predetermined number of levels.

14.   A method of filtering a decoded video sequence in a video compression and decompression system, comprising:

receiving a decoded video sequence;

determining a motion activity of each frame of the decoded video sequence;

categorizing each frame as a frame of high activity or as a frame of low activity; and

adjusting a filter strength of a filter to filter the decoded video sequence as a function of the motion activity.

15. The method of Claim 14, further comprising:

increasing a first counter value for each high activity frame and decreasing the first counter value for each low activity frame;

decreasing a second counter value for each high activity frame and increasing the second counter value for each low activity frame, and

determining a difference between the first counter value and the second counter value.

16. The method of Claim 15, further comprising:

comparing the difference with at least one predetermined threshold value; and

generating a control signal to adjust the filter strength.

17. The method of Claim 16, wherein adjusting the filter strength includes selectively adjusting the filter strength to one of a number of predetermined levels.

18. The method of Claim 16, wherein adjusting the filter strength includes selectively adjusting the filter strength to one of a high level, a medium level and a weak level.

19. The method of Claim 18, wherein adjusting the filter strength includes adjusting the filter strength to the medium level is a default level.

20. The method of Claim 19, further comprising adjusting the filter strength to the strong level if the difference is positive and if the difference is greater than a first threshold value.

21. The method of Claim 20, further comprising resetting the filter strength to the medium level if the difference is negative and if an absolute value of the difference is greater than a second threshold value.

22. The method of Claim 19, further comprising adjusting the filter strength to the weak level if the difference is negative and if an absolute value of the difference is greater than a third threshold value.

23. ~~The method of Claim 22, further comprising resetting the filter strength to the medium level if the difference is positive and if the difference is greater than a fourth threshold value.~~